Scanned by	Date	Doc ID #
DCH	2/6/08	3864

DENR USE ONLY: ☐ Paper Report ☐ Electronic Data - Email CD (data loaded: Yes / No) Doc/Event #:

NC DENR
Division of Waste Management - Solid Waste

Environmental Monitoring Reporting Form

Notice: This form and any information attached to it are "Public Records" as defined in NC General Statute 132-1. As such, these documents are available for inspection and examination by any person upon request (NC General Statute 132-6).

Instructions:

- Prepare one form for each individually monitored unit.
- Please type or print legibly.
- Attach a notification table with values that attain or exceed NC 2L groundwater standards or NC 2B surface water standards. The notification must include a preliminary analysis of the cause and significance of each value. (e.g. naturally occurring, off-site source, pre-existing condition, etc.).
- Attach a notification table of any groundwater or surface water values that equal or exceed the reporting limits.
- Attach a notification table of any methane gas values that attain or exceed explosive gas levels. This includes any structures on or nearby the facility (NCAC 13B .1629 (4)(a)(i).
- In accordance with NC General Statutes Chapter 89C and 89E and NC Solid Waste Management Rules 15A NCAC 13B, be sure to affix a seal to the bottom of this page, when applicable.
- Send the original signed and sealed form, any tables, and Electronic Data Deliverable to: Compliance Unit, NCDENR-DWM, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27699-1646.

Solid Waste Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

[EDD] SUBMITTED BY ENVIRONMENT 1, INC. / TABLES, DISCUSSION BY QUIBLE & ASSOC

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: STEVE JONES / ENVIRONMENT 1 WARREN EADUS / QUIBLE Phone: ENVIRONMENT 1 252-756-6208 / QUIBLE 252.261.3300

E-mail: weadus@quible.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
CURRITUCK COUNTY LANDFILL	216 AIRPORT ROAD MAPLE, NC 27956	2701	.0500	12/06/07

Environmental Status: (Check all that apply)

☐ Initial/Background Monitoring ☑ Detection Monitoring ☐ Assessment Monitoring ☐ Corrective Action

Type of data submitted: (Check all that apply)

☑ Groundwater monitoring data from monitoring wells
☐ Groundwater monitoring data from private water supply wells
☐ Leachate monitoring data
☑ Surface water monitoring data
☐ Methane gas monitoring data
☐ Corrective action data (specify) _____
☐ Other(specify)

Notification attached?

☐ No. No groundwater or surface water standards were exceeded.
☑ Yes, a notification of values exceeding a groundwater or surface water standard is attached. It includes a list of groundwater and surface water monitoring points, dates, analytical values, NC 2L groundwater standard, NC 2B surface water standard or NC Solid Waste GWPS and preliminary analysis of the cause and significance of any concentration.
☐ Yes, a notification of values exceeding an explosive methane gas limit is attached. It includes the methane monitoring points, dates, sample values and explosive methane gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

WARREN EADUS, L.G. — Facility Representative Name (Print)

AGENT FOR CURRITUCK CO. — Title

252.261.3300 — (Area Code) Telephone Number

WGadus — Signature

1/17/08 — Date

Affix NC Licensed Professional Geologist/Engineer Seal here:

NORTH CAROLINA LICENSED SEAL 1954 GEOLOGIST WARREN DENNIS EADUS

Revised 01/2007

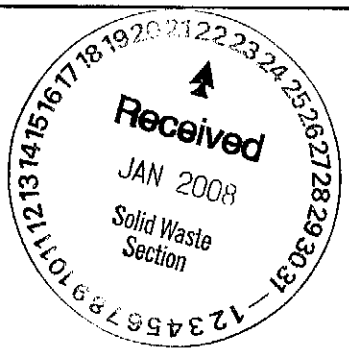
Quible

Quible & Associates, P.C.
ENGINEERING • ENVIRONMENTAL SCIENCES • PLANNING • SURVEYING
SINCE 1959

P.O. Drawer 870
Kitty Hawk, NC 27949
Phone: 252-261-3300
Fax: 252-261-1260

PRINCIPALS
Sean C. Boyle, P.E.
Joseph S. Lassiter, C.E.P.
Eduardo J. Valdivieso, P.E.

ASSOCIATES
Joseph J. Anlauf, P.E.
Katherine C. Marchello, P.L.S.



January 17, 2008

Donald Herndon
ND DENR-Division of Waste Mgt-Solid Waste Section
1646 Mail Service Center
Raleigh, NC 27699-1646

Re: Environmental Reporting Form
Currituck County MSW Landfill
Permit #27-01

Mr. Herndon:

Please find enclosed an Environmental Monitoring Reporting Form and associated data and documentation related to the groundwater and surface water sampling activities conducted at the above referenced facility on December 6, 2007 by Environment 1, Incorporated (Environment 1). Quible & Associates, P.C. (Quible) was asked to review the laboratory analytical data and provide the appropriate technical assistance in fulfilling the reporting requirements as required by the Division of Waste Management Solid Waste Section (Division).

Please note, included with the most recent groundwater and surface water quality results received by Quible from Currituck County, were corrected laboratory analytical results from the June 2007 sampling event. Based on a review of the corrected laboratory analytical results, it appears that concentrations of dichloroethane reported in the original laboratory analytical report were actually concentrations of benzene detected in the groundwater samples collected from Well #5. The summary tables of analytical data included with this report reflect this new information. Environment 1 stated that electronic data had already been submitted to the Division for the December 6, 2007 sampling event and the corrected data from the June 27, 2007 sampling event. Therefore, electronic data files are not being submitted with this environmental monitoring data submittal.

Based on the groundwater analytical results reported in the December 28, 2007 Laboratory Analytical Report, the concentrations of benzene reported in the groundwater samples collected from Well #5 (1.60 µg/L) exceed the 2L GQS. In addition, the concentrations of vinyl chloride reported in the groundwater samples collected from Well #5 (0.90 µg/L) exceed the 2L GQS. Concentrations of arsenic reported in the groundwater samples collected from Well #1 (0.90 µg/L) exceed the 2L GQS.

A table summarizing the groundwater analytical data for groundwater and surface water samples with detectable concentrations of metals and volatile organic constituents from the last three sampling events has been included with this submittal. A copy of the most recent laboratory data and a table entitled; *Table of Values Which Exceed Established Standards And/Or Exceed Reporting Levels,* submitted to Currituck County by Environment 1 has also been included.

Arsenic is a naturally occurring metal, and is readily found in measurable quantities in both groundwater and soils in the coastal plain of North Carolina. Conventional metals analysis (EPA Method 200.8) in groundwater requires acid preservation. The acid preservation dissolves sediments and otherwise insoluble metals suspended in the groundwater sample, elevating the concentrations of dissolved metals

in the samples. However, based on a review of the chain of custody included with the laboratroy analytical report provided by Environment 1, groundwater samples collected during the last sampling event were not preserved in the field. The turbidity of the samples at the time of preservation is not known or required to be known. Therefore, it is not known if suspended sediments influence the arsenic concentrations reported in the groundwater samples. In addition, the region has experienced near drought conditions for many months. Often, lower than normal groundwater levels in monitoring wells can lead to higher turbidity and above normal concentrations of contaminant constituents. The exact cause of the relative increases in arsenic concentrations observed in many of the wells over the last year is not clear but may be attributed to any or all of the factors discussed.

Concentrations of benzene that exceed the 2L GQS have been reported in the groundwater samples collected from Well# 5 over the last two sampling events. Benzene is generally associated with petroleum contaminants and there are no likely or obvious sources of petroleum contamination readily identifiable at the site. The County maintains several used oil and petroleum waste tanks near the scale house at the Transfer Station. However, these tanks are several hundred feet away from Well #5. The site is open to the general public during normal operating hours and it is possible that benzene contamination reported in Well #5 could be related to negligent dumping of petroleum products or containers of petroleum products.

Concentrations of vinyl-chloride reported in the groundwater samples collected from Well #5 (0.90 µg/L) have increased since the June 27, 2007 sampling event. Vinyl chloride is a major component of PVC production. The cause of the concentrations of vinyl chloride reported in the ground water samples collected from Well #5 is not clear at this time.

The next scheduled sampling event at the Currituck County Landfill is in June of 2008.

Please do not hesitate to contact the undersigned at 252.261.3300, if you have any questions or require any additional information in this matter.

Sincerely,

Quible & Associates, P.C.

Warren Eadus, L.G.

enc As stated

cc file

Summary of Groundwater and Surface Water Analytical Data Volatile Organics
Currituck County Landfill Permit #27-01

Sample ID	Date	Well #1	Well #2	Well #3	Well #4	Well #5	Well #6	Well #7	Well #8	Pond	2L GQS	2B SWS
benzene	12/07/06	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	1.0	71.4
	06/27/07	<0.16	0.80	<0.16	<1.0	**1.80**	0.80	<0.16	<0.16	<0.16		
	12/06/07	<0.16	0.40	<0.16	<0.16	**1.60**	0.70	<0.16	0.90	<0.16		
2-butanone	12/07/06	<50.00	<50.00	<50.00	<50.00	<50.00	<50.00	<50.00	<50.00	<50.00	4,200	T[5]
	06/27/07	1.50	1.40	2.20	2.10	2.10	1.80	5.30	2.10	2.80		
	12/06/07	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85		
1,2 dichloroethane	12/07/06	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	0.38	T
	06/27/07	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12		
	12/06/07	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12		
chlorobenzene	12/07/06	<3.00	15.30	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	50	T
	06/27/07	<0.13	34.90	<0.13	<0.13	1.00	<0.13	<0.13	<0.13	<0.13		
	12/06/07	<0.13	10.50	<0.13	<0.13	1.40	0.20	<0.13	0.90	<0.13		
1,4-dichlorobenzene	12/07/06	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	1.4	T
	06/27/07	<0.21	0.40	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21		
	12/06/07	<0.21	0.30	<0.21	<0.21	<0.21	<0.21	<0.21	0.30	<0.21		
chloromethane	12/07/06	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	2.6	T
	06/27/07	<0.18	<0.18	<0.18	<0.18	0.70	<0.18	0.20	<0.18	<0.18		
	12/06/07	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18		
vinyl chloride	12/07/06	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	0.015	525
	06/27/07	<0.34	<0.34	<0.34	<0.34	**0.60**	**0.50**	<0.34	<0.34	<0.34		
	12/06/07	<0.34	<0.34	<0.34	<0.34	**0.90**	<0.34	<0.34	<0.34	<0.34		

Summary of Groundwater and Surface Water Analytical Data Volatile Organics
Currituck County Landfill Permit #27-01

Sample ID	Date	Well #1	Well #2	Well #3	Well #4	Well #5	Well #6	Well #7	Well #8	Pond	2L GQS	2B SWS
acetone	12/07/06	<50.00	<50.00	<50.00	<50.00	<50.00	<50.00	<50.00	<50.00	<50.00	700	T
	06/27/07	<1.21	<1.21	1.70	1.40	1.70	<1.21	3.20	1.50	2.40		
	12/06/07	<1.21	<1.21	<1.21	<1.21	1.30	<1.21	<1.21	<1.21	<1.21		
1,1-dichloroethane	12/07/06	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	70	T
	06/27/07	<0.16	<0.16	<0.16	<0.16	0.20	<0.16	<0.16	<0.16	<0.16		
	12/06/07	<0.16	<0.16	<0.16	<0.16	0.40	<0.16	<0.16	<0.16	<0.16		
chloroform	12/07/06	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	70	T
	06/27/07	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	0.20		
	12/06/07	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13		
toluene	12/07/06	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	1,000	11
	06/27/07	<0.13	<0.13	<0.13	<0.13	0.20	<0.13	<0.13	<0.13	<0.13		
	12/06/07	<0.13	<0.13	<0.13	<0.13	0.20	<0.13	<0.13	<0.13	<0.13		

Notes:

1. Groundwater and surface water samples collected by Environment 1, Incorporated on behalf of Currituck County. Laboratory Analytical Reports provided by Currituck County.
2. NC DENR Division of Water Quality Title 15A NCAC 2L .0202 Groundwater Quality Standards April 2005.
3. NC DENR Division of Water Quality Title 15A NCAC Subchapter 2B Water Quality Standards for Freshwater Classifications April 2003. Surface Water Standards listed are the more stringent of either the aquatic life or human health standard for all Freshwater Classifications.
4. Concentrations in bold type meet or exceed either of the 2L or 2B Standards.
5. Title 15A 2B .0208-Standards for Toxic Substances and Temperature.

Summary of Groundwater and Surface Water Analytical Data Metals[1]
Currituck County Landfill Permit #27-01

Sample ID	Date	Well #1	Well #2	Well #3	Well #4	Well #5	Well #6	Well #7	Well #8	Pond	2L GQS[2]	2B SWS[3]
Arsenic	12/07/06	17	<7.0	<7.0	<7.0	<7.0	14	<7.0	<7.0	<7.0	50	10
	06/27/07	**61**	6.6	4.7	<0.47	3.8	17	1.1	0.8	0.6		
	12/06/07	**55**	5.9	5.5	1.7	5.7	36	3.1	2.0	<0.47		
Barium	12/07/06	<60	<60	<60	<60	71	<60	<60	<60	69	2,000	1,000
	06/27/07	38.2	121	8.6	43.5	159	26	26.9	51.0	15.3		
	12/06/07	30.3	96.3	8.4	65.3	172	35.8	23.7	162	18.3		
Cadmium	12/07/06	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**2**[4]	1.75	2.0
	06/27/07	0.3	0.2	<0.06	0.9	<0.06	<0.06	0.1	0.8	0.7		
	12/06/07	0.1	0.2	0.1	1.2	0.1	0.2	0.2	0.8	<0.06		
Total Chromium	12/07/06	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0	50	50
	06/27/07	1.9	1.1	0.5	1.5	4.1	0.4	0.9	1.4	0.5		
	12/06/07	1.0	0.3	<0.24	1.5	4.3	<0.24	0.4	1.7	<0.24		
Lead	12/07/06	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	8	15	25
	06/27/07	1.4	0.4	<0.07	1.4	<0.07	<0.07	<0.07	1.2	<0.07		
	12/06/07	1.1	2.8	0.3	2.2	0.3	0.2	0.2	1.3	0.3		
Mercury	12/07/06	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1.05	0.012
	06/27/07	<0.04	<0.04	<0.04	<0.04	<0.04	0.05	<0.04	<0.04	<0.04		
	12/06/07	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		
Selenium	12/07/06	<10	<10	<10	<10	<10	<10	<10	<10	<10	50	5
	06/27/07	<0.35	1.7	0.5	0.5	5.0	0.6	1.1	0.6	<0.35		
	12/06/07	0.4	3.7	0.6	4.8	11	0.9	4.0	3.6	<0.35		
Silver	12/07/06	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0	17.5	0.06
	06/27/07	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52		
	12/06/07	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52		

Notes on following page.

Summary of Groundwater and Surface Water Analytical Data Metals[1]
Currituck County Landfill Permit #27-01

1. Groundwater and surface water samples collected by Environment 1, Incorporated on behalf of Currituck County. Laboratory Analytical Reports provided by Currituck County.
2. NC DENR Division of Water Quality Title 15A NCAC 2L .0202 Groundwater Quality Standards April 2005.
3. NC DENR Division of Water Quality Title 15A NCAC Subchapter 2B Water Quality Standards for Freshwater Classifications. Surface Water Standards listed are the more stringent of either the aquatic life or human health standard for all Freshwater Classifications.
4. Concentrations in bold type meet or exceed either of the 2L or 2B Standards.
5. Title 15A 2B .0208-Standards for Toxic Substances and Temperature.

Environment 1, Incorporated

Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6028

CURRITUCK COUNTY LANDFILL
ATTN: BRENDA/FRANK BRAY
PUBLIC WORKS DEPARTMENT
P.O. BOX 38
CURRITUCK ,NC 27929

DATE COLLECTED: 12/06/07
DATE REPORTED : 12/28/07

REVIEWED BY:

PARAMETERS	MDL	SWSL	Well #1	Well #2	Well #3	Well #4	Well #5	Analysis Date	Analyst	Method Code
PH (field measurement), Units			5.5	6.6	6.0	4.8	6.2	12/06/07	RJH	SM4500HB
Arsenic, ug/l	0.47	10.0	55	5.9 J	5.5 J	1.7 J	5.7 J	12/13/07	LFJ	EPA200.8
Barium, ug/l	0.04	100.0	30.3 J	96.3 J	8.4 J	65.3 J	172	12/13/07	LFJ	EPA200.8
Cadmium, ug/l	0.06	1.0	0.1 J	0.2 J	0.1 J	1.2	0.1 J	12/13/07	LFJ	EPA200.8
Total Chromium, ug/l	0.24	10.0	1.0 J	0.3 J	--- U	1.5 J	4.3 J	12/13/07	LFJ	EPA200.8
Lead, ug/l	0.07	10.0	1.1 J	2.8 J	0.3 J	2.2 J	0.3 J	12/13/07	LFJ	EPA200.8
Mercury, ug/l	0.04	0.20	--- U	--- U	--- U	--- U	--- U	12/18/07	LFJ	EPA200.8
Selenium, ug/l	0.35	10.0	0.4 J	3.7 J	0.6 J	4.8 J	11	12/13/07	LFJ	EPA200.8
Silver, ug/l	0.52	10.0	--- U	--- U	--- U	--- U	--- U	12/13/07	LFJ	EPA200.8
Conductivity (at 25c), uMhos	1.0	1.0	184	1000	166	981	1322	12/06/07	RJH	SM2510B
Temperature, °C			16	16	18	18	17	12/06/07	RJH	SM2550B
Static Water Level, feet			8.16	5.98	6.68	11.34	9.28	12/06/07	RJH	
Well Depth, feet			21.15	18.63	21.34	23.60	20.34	12/06/07	RJH	

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6028

CURRITUCK COUNTY LANDFILL
ATTN: BRENDA/FRANK BRAY
PUBLIC WORKS DEPARTMENT
P.O. BOX 38
CURRITUCK ,NC 27929

DATE COLLECTED: 12/06/07
DATE REPORTED : 12/28/07

REVIEWED BY:

PARAMETERS	MDL	SWSL	Well #6	Well #7	Well #8	Pond	Analysis Date	Analyst	Method Code
PH (field measurement), Units			5.5	6.2	6.4	7.2	12/06/07	RJH	SM4500HB
Arsenic, ug/l	0.47	10.0	36	3.1 J	2.0 J	--- U	12/13/07	LFJ	EPA200.8
Barium, ug/l	0.04	100.0	35.8 J	23.7 J	162	18.3 J	12/13/07	LFJ	EPA200.8
Cadmium, ug/l	0.06	1.0	0.2 J	0.2 J	0.8 J	--- U	12/13/07	LFJ	EPA200.8
Total Chromium, ug/l	0.24	10.0	--- U	0.4 J	1.7 J	--- U	12/13/07	LFJ	EPA200.8
Lead, ug/l	0.07	10.0	0.2 J	0.2 J	1.3 J	0.3 J	12/13/07	LFJ	EPA200.8
Mercury, ug/l	0.04	0.20	--- U	--- U	--- U	--- U	12/18/07	LFJ	EPA200.8
Selenium, ug/l	0.35	10.0	0.9 J	4.0 J	3.6 J	--- U	12/13/07	LFJ	EPA200.8
Silver, ug/l	0.52	10.0	--- U	--- U	--- U	--- U	12/13/07	LFJ	EPA200.8
Conductivity (at 25c), uMhos	1.0	1.0	187	565	1061	177	12/06/07	RJH	SM2510B
Temperature, °C			18	17	16	8	12/06/07	RJH	SM2550B
Static Water Level, feet			6.64	9.00	6.15		12/06/07	RJH	
Well Depth, feet			20.92	20.40	20.88		12/06/07	RJH	

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CURRITUCK COUNTY LANDFILL
ATTN: BRENDA/FRANK BRAY
PUBLIC WORKS DEPARTMENT
P.O. BOX 38
CURRITUCK, NC 27929

CLIENT ID: 6028

ANALYST: MAO
DATE COLLECTED: 12/06/07 Page: 1
DATE REPORTED: 12/28/07

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	Date Analyzed: MDL	SWSL	12/13/07 Well #1	12/13/07 Well #2	12/13/07 Well #3	12/13/07 Well #4	12/14/07 Well #5
1. Chloromethane	0.18	1.0	--- U	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.34	1.0	--- U	--- U	--- U	--- U	0.90 J
3. Bromomethane	0.26	10.0	--- U	--- U	--- U	--- U	--- U
4. Chloroethane	0.29	10.0	--- U	--- U	--- U	--- U	--- U
5. Trichlorofluoromethane	0.13	1.0	--- U	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.14	5.0	--- U	--- U	--- U	--- U	--- U
7. Acetone	1.21	100.0	--- U	--- U	--- U	--- U	1.30 J
8. Iodomethane	0.12	10.0	--- U	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.14	100.0	--- U	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.14	1.0	--- U	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.13	5.0	--- U	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.16	5.0	--- U	--- U	--- U	--- U	0.40 J
13. Vinyl Acetate	0.20	5.0	--- U	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.14	5.0	--- U	--- U	--- U	--- U	0.20 J
15. 2-Butanone	0.85	100.0	--- U	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.11	3.0	--- U	--- U	--- U	--- U	--- U
17. Chloroform	0.13	5.0	--- U	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.11	1.0	--- U	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.13	1.0	--- U	--- U	--- U	--- U	--- U
20. Benzene	0.16	1.0	--- U	0.40 J	--- U	--- U	1.60
21. 1,2-Dichloroethane	0.12	1.0	--- U	--- U	--- U	--- U	--- U
22. Trichloroethene	0.13	1.0	--- U	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.17	1.0	--- U	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.13	1.0	--- U	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.17	1.0	--- U	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	0.68	100.0	--- U	--- U	--- U	--- U	--- U
27. Toluene	0.13	1.0	--- U	--- U	--- U	--- U	0.20 J
28. trans-1,3-Dichloropropene	0.14	1.0	--- U	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.20	1.0	--- U	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.00	50.0	--- U	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.14	3.0	--- U	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.13	1.0	--- U	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.13	3.0	--- U	10.50	--- U	--- U	1.40 J
35. 1,1,1,2-Tetrachloroethane	0.14	5.0	--- U	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
37. Xylenes	0.48	5.0	--- U	--- U	--- U	--- U	--- U
38. Dibromomethane	0.17	10.0	--- U	--- U	--- U	--- U	--- U
39. Styrene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
40. Bromoform	0.11	3.0	--- U	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.16	3.0	--- U	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.06	1.0	--- U	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.21	1.0	--- U	0.30 J	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.13	5.0	--- U	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.26	13.0	--- U	--- U	--- U	--- U	--- U
46. Acrylonitrile	1.49	200.0	--- U	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.14	100.0	--- U	--- U	--- U	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CURRITUCK COUNTY LANDFILL
ATTN: BRENDA/FRANK BRAY
PUBLIC WORKS DEPARTMENT
P.O. BOX 38
CURRITUCK, NC 27929

CLIENT ID: 6028

ANALYST: MAO
DATE COLLECTED: 12/06/07
DATE REPORTED: 12/28/07

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	Date Analyzed: MDL	SWSL	12/14/07 Well #6	12/14/07 Well #7	12/14/07 Well #8	12/14/07 Pond
1. Chloromethane	0.18	1.0	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.34	1.0	--- U	--- U	--- U	--- U
3. Bromomethane	0.26	10.0	--- U	--- U	--- U	--- U
4. Chloroethane	0.29	10.0	--- U	--- U	0.40 J	--- U
5. Trichlorofluoromethane	0.13	1.0	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.14	5.0	--- U	--- U	--- U	--- U
7. Acetone	1.21	100.0	--- U	--- U	--- U	--- U
8. Iodomethane	0.12	10.0	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.14	100.0	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.14	1.0	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.13	5.0	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.16	5.0	--- U	--- U	--- U	--- U
13. Vinyl Acetate	0.20	5.0	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.14	5.0	0.30 J	--- U	--- U	--- U
15. 2-Butanone	0.85	100.0	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.11	3.0	--- U	--- U	--- U	--- U
17. Chloroform	0.13	5.0	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.11	1.0	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.13	1.0	--- U	--- U	--- U	--- U
20. Benzene	0.16	1.0	0.70 J	--- U	0.90 J	--- U
21. 1,2-Dichloroethane	0.12	1.0	--- U	--- U	--- U	--- U
22. Trichloroethene	0.13	1.0	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.17	1.0	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.13	1.0	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.17	1.0	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	0.68	100.0	--- U	--- U	--- U	--- U
27. Toluene	0.13	1.0	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.14	1.0	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.20	1.0	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.16	1.0	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.00	50.0	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.14	3.0	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.13	1.0	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.13	3.0	0.20 J	--- U	0.90 J	--- U
35. 1,1,1,2-Tetrachloroethane	0.14	5.0	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.16	1.0	--- U	--- U	--- U	--- U
37. Xylenes	0.48	5.0	--- U	--- U	--- U	--- U
38. Dibromomethane	0.17	10.0	--- U	--- U	--- U	--- U
39. Styrene	0.16	1.0	--- U	--- U	--- U	--- U
40. Bromoform	0.11	3.0	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.16	3.0	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.06	1.0	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.21	1.0	--- U	--- U	0.30 J	--- U
44. 1,2-Dichlorobenzene	0.13	5.0	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.26	13.0	--- U	--- U	--- U	--- U
46. Acrylonitrile	1.49	200.0	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.14	100.0	--- U	--- U	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Table of Values Which Exceed Established Standards And/Or Exceed Reporting Levels

Facility Name: CURRITUCK COUNTY LANDFILL Permit #: 2701 Lab ID# 6028

Location	Collection Date	Exceeds Std	Parameter	CAS #	Result, ug/l	NC 2L STD **	NC GWP STD **	NC 2B SWS **
Well #1	12/06/2007	Y	Arsenic	7440-38-2	55	50		
Well #2	12/06/2007		Chlorobenzene	108-90-7	10.50	50		
Well #4	12/06/2007		Cadmium	7440-43-9	1.2	1.75		
Well #5	12/06/2007		Barium	7440-39-3	172	2000		
Well #5	12/06/2007		Selenium	7782-49-2	11	50		
Well #5	12/06/2007	Y	Benzene	71-43-2	1.60	1		
Well #6	12/06/2007		Arsenic	7440-38-2	36	50		
Well #8	12/06/2007		Barium	7440-39-3	162	2000		

** Note: NC 2L STD = NC 2L Ground Water Standard
NC GWP STD = NC Solid Waste Groundwater Protection Standard
NC 2B SWS = NC 2B Surface Water Standard

Environment 1, inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858

Phone (252) 756-6208 • Fax (252) 756-0633

CHAIN OF CUSTODY RECORD

CLIENT: 6028 Week: 49

CURRITUCK COUNTY LANDFILL
ATTN: BRENDA/FRANK BRAY
PUBLIC WORKS DEPARTMENT
P.O. BOX 38
CURRITUCK NC 27929

(252) 232-2769

DISINFECTION
- ☐ CHLORINE
- ☐ UV
- ☐ NONE
- ☐ _____

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field pH	Metals	Conductivity	Temperature	Field Parameter	EPA 8260B	8260 Dup. 1	8260 Dup. 2
							2				2	2	2
						P	P	P	P		G	G	G
						A	A	A	A		E	E	E
Well #1	12/06/07	1135		16	5	G	G	G	G	G	G	G	G
Well #2	12/06/07	1120		16	4	G	G	G	G	G	G	G	
Well #3	12/06/07	1100		18	4	G	G	G	G	G	G	G	
Well #4	12/06/07	1025		18	4	G	G	G	G	G	G	G	
Well #5	12/06/07	1015		17	4	G	G	G	G	G	G	G	
Well #6	12/06/07	1050		18	4	G	G	G	G	G	G	G	
Well #7	12/06/07	1155		17	4	G	G	G	G	G	G	G	
Well #8	12/06/07	1035		16	4	G	G	G	G	G	G	G	
Pond	12/06/07	1145		8	4	G	G	G	G		G	G	

CHLORINE NEUTRALIZED AT COLLECTION

pH CHECK (LAB)

CONTAINER TYPE, P/G

CHEMICAL PRESERVATION

PARAMETERS

A - NONE D - NAOH
B - HNO_3 E - HCL
C - H_2SO_4 F - ZINC ACETATE
G - NA THIOSULFATE

CLASSIFICATION:
- ☐ WASTEWATER (NPDES)
- ☐ DRINKING WATER
- ☐ DWQ/GW
- ☒ SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY
(Y) N

SAMPLES COLLECTED BY:
(Please Print)
Bob Hagee / FCX

SAMPLES RECEIVED IN LAB AT 2.6 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob Hagee	12/06/07 2:45PM	[signature]	12/6/07 2:45PM
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

Instructions for completing this form are on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

FORM #5

№ 155886